AUG 11 2006

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE ...

Applicant(s):

Hans-Heinrich GATZEN

Serial No.:

10/540,119

Filed:

June 20, 2005

For:

READ-WRITE HEAD WITH INTEGRATED MICROACTUATOR

Art Unit:

2627

Examiner:

Not Yet Assigned

Confirmation No.:

8882

Customer No.:

27623

Attorney Docket No.: 2133.099USU

Mail Stop Amendment Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

#### REQUEST FOR CORRECTED FILING RECEIPT

Dear Sir:

The applicant is requesting that correction be made to the filing receipt. Please note that "Hans-heirich Gatzen, Aptos, Germany" should read: Hans-Heinrich Gatzen, Aptos, San Jose, California as stated on the Declaration.

Also, please note that the "Title" should read: READ-WRITE HEAD WITH INTEGRATED MICROACTUATOR as stated on the first page of the specification filed on June 20, 2005. A copy of the original marked-up filing receipt and a copy of the first page of the specification are enclosed.

Please charge any additional fees or credit any such fees, if necessary to Deposit Account No. 01-0467 in the name of Ohlandt, Greeley, Ruggiero & Perle. A duplicate copy of this sheet is attached.

Date: August 11, 2006

Charles N. J. Ruggiero

Reg. No. 28,468

Ohlandt, Greeley, Ruggiero & Perle, L.L.P.

One Landmark Square, 10th Floor Stamford, Connecticut 06901-2682

(203) 327-4500

CERTIFICATE OF TRANSMISSION

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING FACSIMILE TRANSMITTED TO THE FACSIMILE NUMBER 571-273-8300, 10 total pages, do MAIL STOP Amendment, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450, ON August 11, 2006.

Ruth J. Olivo

PAGE 02/09

AUG 1 1 2006

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

Hans-Heinrich GATZEN

Serial No.:

10/540,119

Filed:

June 20, 2005

For:

READ-WRITE HEAD WITH INTEGRATED MICROACTUATOR

Art Unit:

2627

Examiner:

Not Yet Assigned

Confirmation No.:

8882

Customer No.:

27623

Attomey Docket No.: 2133.099USU

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## REQUEST FOR CORRECTED FILING RECEIPT

Dear Sir.

The applicant is requesting that correction be made to the filing receipt. Please note that "Hans-heirich Gatzen, Aptos, Germany" should read: Hans-Heinrich Gatzen, Aptos, San Jose, California as stated on the Declaration.

Also, please note that the "Title" should read: READ-WRITE HEAD WITH INTEGRATED MICROACTUATOR as stated on the first page of the specification filed on June 20, 2005. A copy of the original marked-up filing receipt and a copy of the first page of the specification are enclosed.

Please charge any additional fees or credit any such fees, if necessary to Deposit Account No. 01-0467 in the name of Ohlandt, Greeley, Ruggiero & Perle. A duplicate copy of this sheet is attached.

Date: August 11, 2006

Charles N. J. Ruggiero

Reg. No. 28,468

Ohlandt, Greeley, Ruggiero & Perle, L.L.P.

One Landmark Square, 10th Floor Stamford, Connecticut 06901-2682

(203) 327-4500

CERTIFICATE OF TRANSMISSION

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING FACSIMILE TRANSMITTED TO THE FACSIMILE NUMBER 571-273-8300, 10 total pages, c/o MAIL STOP Amendment, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450, ON August 11, 2006.

Ruth J. Olivo

August 11, 2008



### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Potent and Trademork Office
Address COMMERCE FOR PATENTS
P.O. Box 1450
Alcordin, Update 22313-1450
www.uspro.gov

APPL NO. | FILING OR 371 | ART UNIT | FIL FEE REC'D | ATTY.DOCKET NO | DRAWINGS | TOT CLMS | IND CLMS | 10/540,119 | 03/09/2006 | 2627 | 1865 | 2133.099USU | 13 | 38 | 1

27623 OHLANDT, GREELEY, RUGGIERO & PERLE, LLP ONE LANDMARK SQUARE, 10TH FLOOR STAMFORD, CT 08901 CONFIRMATION NO. 8882
FILING RECEIPT
\*\*\*C000000019661576\*\*

Date Mailed: 07/25/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Hans heirich Gatzen, Aptos, GERMANY;

Hans-Heinrich Gatzen, Aptos, San Jose, California

Power of Attorney: The patent practitioners associated with Customer Number 27623.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/EP03/14319 12/16/2003

Foreign Applications

GERMANY 102 60 009.0 12/18/2002

If Required, Foreign Filing License Granted: 07/18/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US10/540.119

Projected Publication Date: 10/26/2006

Non-Publication Request: No

Early Publication Request: No ...

" SMALL ENTITY "

Title

RECEIVED

4

JUL 27 2008

UNICARUIT CARLES LES AUGGIERO & PERILE. LL

Page 2 of 3

Write/read head provided with an intergrated microactuator

Read-Write Head with Integrated Microactuator

Preliminary Class
360

## PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process simplifies the filing of patent applications on the same invention in member countries, but does not result in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

# LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

### GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

Page 3 of 3

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

### **NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

NR. 6864 S. 2/4

# DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

		(	Docket No Customer No	2133,099USU : 27623		
As a below named inventor, I hereby declare that:						
My residence, post office address and citizenship are as stated below next to my name.						
I believe I am the original, first and sole inventor of the subject matter that is claimed and for which a patent is sought on the invention entitled:						
READ-WRITE HEAD WITH INTEGRATED MICROACTUATOR						
the specification of which						
(check one)	is attached hereto	) <b>.</b>				
<u>_xx</u>	was filed on June and was amended	20, 2005 as Applica	ation Serial N	o. <b>10/540,119</b> (if applicable).		
I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.						
I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to the examination of this application as defined in Title 37, Code of Federal Regulations, §1.56.						
I hereby claim foreign priority benefits under Title 35, United States Code, $\S119(a)-(d)$ or $(f)$ or Section 365(b) of any foreign application(s) for patent or inventor's or plant breeder's rights certificate(s) or Section 365(a) of any PCT International Application which designated at least one country other than the United States listed below and have also identified below, by checking the box, any foreign application(s) for patent or inventor's certificate(s) or PCT international application having a filing date before that of the application on which priority is claimed:						
Prior Foreign Application(s)				Priority Claimed		
10260009.0 (Number)	Germany (Country)	18/December/20 (Day/Mon/Year F	002 iled)	X_Yes No		
(Number)	(Country)	(Day/Mon/Year F	iled)	Yes No		
(Number)	(Country)	(Day/Mon/Year Fl	led)	Yes No		
I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the						

Page 1 of 3

8. DEZ. 2005 10:46

filing date of this application:

NR. 6864 S. 3/4

first paragraph of Title 35, United States Code, §112, we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international

(Application Serial No.)

(Filing Date)

(Status - patent, pend., abandon.)

(Application Serial No.)

(Filing Date)

(Status - patent, pend., abandon.)

I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States provisional application(s) fisted below:

(Application Serial No.)

(Filing Date)

(Status - patent, pend., abandon.)

(Application Serial No.)

(Filing Date)

(Status - patent, pend., abandon.)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

EGISTRATION NUMBERS
28,468 31.019

SEND CORRESPONDENCE TO:	DIRECT TELEPHONE
	CALLS TO:
Charles N.J. Ruggiero, Esq.	
Ohlandt, Greeley, Ruggiero & Perle, L.L.P.	Charles N.J. Ruggiero, Esq.
	Telephone: (203) 327-4500
Stamford, Connecticut 06901-2682	
One Landmark Square, 10 <sup>th</sup> Floor Stamford, Connecticut 06901-2682	Telephone: (203) 327-4500 Telefax: (203) 327-6401

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent Issued thereon.

NR. 6864 S. 4/4

FULL NAME OF INVENTOR	LAST NAME GATZEN	FIRST NAME Hans-Heinrich	MIDDLE NAME
RESIDENCE & CITIZENSHIP	CITY Isembagen A Pro 5	STATE OR COUNTRY Germany USA	CITIZENSHIP
POST OFFICE ADDRESS	P.O. ADDRESS Teichhuhnding 36 P.O. BOX 977/	CITY & STATE	ZIP CODE 30916

4621-60V-05

Inventor's signature / HANS-HEINRICH GATZEN Date 26 - WOV \_\_\_ 2005

PCT/EP03/14319 Gatzen, Hans-Heinrich pr

02GAT0456WOP

Read-Write Head with Integrated Microactuator

# Description

The invention in general concerns read or read and write heads for data storage devices, in particular with an integrated microactuator for fine positioning.

Due to increasing storage density, the requirements for track following of read-write heads on data tracks on which data are stored digitally, for instance in form of magnetic flux 10 changes, are increasing as well. Read-write heads are used in all magnetic mass storage devices like hard disk drives, diskette drives, and tape files. In case of hard disk drives, a positioner accomplishes the track access to a data track as. well as track following thereon. All read write arms are 15 mounted to it, with each write-head arm covering one disk surface. Thereby, the data tracks are arranged concentrically on the disc surfaces. The positioner's actuator is positioned by a servo system such that the respective read-write head in use is guided on a data track. Typically, at any point in 20 time, only one read-write head writes or reads.

With increasing recording density, both the distances between flux reversals as well as the width of the magnetic data.

tracks are decreasing. For accomplishing the required positioning on the data track, a second stage actuator could be integrated in the read-write head to gain more accurate and higher frequency track following than possible with existing actuators. Concepts for the design of such actuators